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MASSIVE OIL SPILL IN THE GULF OF MEXICO

HEARING BEFORE THE COMMITTEE ON ENERGY AND NATURAL RESOURCES UNITED STATES SENATE ONE HUNDRED ELEVENTH CONGRESS SECOND SESSION

TO
REVIEW ISSUES RELATED TO DEEPWATER OFFSHORE EXPLORATION
FOR PETROLEUM AND THE ACCIDENT IN THE GULF OF MEXICO IN-
VOLVING THE OFFSHORE OIL RIG DEEPWATER HORIZON

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we need to understand, starting with you, Mr. McKay, and then Mr. Newman, and then Mr. Probert. Go right ahead.

**STATEMENT OF LAMAR MCKAY, PRESIDENT AND CHAIRMAN,
BP AMERICA, INC.**

Mr. MCKAY. Thank you, Chairman. Chairman Bingaman, Ranking Member Murkowski, members of the committee: My name is Lamar McKay and I am the Chairman and President of BP America.

We have experienced a tragic series of events. 3 weeks ago tonight, 11 people were lost in an explosion and a fire aboard the Transocean Deepwater Horizon and 17 others were injured. My deepest sympathies go out to the families and friends who have suffered such a terrible loss and to those in the Gulf Coast communities whose lives and livelihoods are being impacted.

Over the last few days I've seen the response firsthand and I've talked with the men and women on the front line. There is a deep and steadfast resolve to do all we humanly can to stop the leak, contain the spill, and to minimize the damage suffered by the environment and the people of the Gulf Coast.

As a responsible party under the Oil Pollution Act, we will carry out our responsibilities to mitigate the environmental and economic impacts of this incident. Our efforts are part of a unified command that was established within hours of the accident and provides a structure for our work with Departments of Homeland Security and Interior, as well as Defense, Energy, OSHA, and other Federal agencies, as well as affected State and local governments and Transocean.

We are grateful for the involvement of President Obama and members of his Cabinet and for the leadership, direction, and resources they have provided. We are also grateful to the Governors, Congressional members, State agencies, and local communities of Mississippi, Alabama, Louisiana, Texas, and Florida.

I want to underscore that the global resources of BP are committed to this effort and have been from the outset. Nothing is being spared. Everyone understands the enormity of what lies ahead and is working to deliver an effective response at the wellhead, on the water, and at the shoreline.

Before I describe our round-the-clock efforts to respond to this series of events, I want to reiterate our commitment to find out what happened. Figuring out what happened and why it happened is a complex process. We are cooperating with the joint investigation by the Departments of Homeland Security and Interior and investigations by Congress. In addition, BP has commissioned an internal investigation whose results we plan to share so we can all learn from these terrible events.

I want to be clear. It's inappropriate to draw any conclusion before all the facts are known. As we speak, our investigation team is locating and analyzing data, interviewing available witnesses, and reviewing and assessing evidence. Today I think it's important to give you and the American public an idea of the questions we are asking. There are really two key sets of questions here and we're actively exploring both of them. First, what caused the explosion and fire on board Transocean's Deepwater Horizon rig? Sec-

ond, why did Transocean's blowout preventer, the key fail-safe mechanism, fail to shut in the well and release the rig?

With respect to the first question, the key issue we are examining is how hydrocarbons could have entered the wellbore. BP as the leaseholder and the operator of the well hired Transocean to drill that well. Transocean as owner and operator of the Deepwater Horizon drilling rig had responsibility for the safety of drilling operations. We don't know yet precisely what happened on the night of April 20, but what we do know is that there were anomalous pressure test readings prior to the explosion. These could have raised concerns about well control prior to the operation to replace mud with seawater in the well, in preparation for setting of the cement plug.

Through our investigation we hope to learn more about what happened and what was done in the hours before the explosion. Apart from looking at the causes of the explosion, we are also examining why the blowout preventer, the BOP as it is called, did not work as the ultimate fail-safe to seal the well and prevent an oil spill. Clearly the BOP remains a critical piece of equipment throughout all operations to ensure well control up until the time the well is sealed with a cement plug and is temporarily abandoned.

We will continue full speed ahead with our investigation, keeping all lines of inquiry open, until we find out what happened and why. At the same time, we are fully engaged in efforts to respond to these events. Our subsea efforts to stop the flow of oil and secure the well involve four parallel and concurrent strategies. Activating the BOP would be the preferred course since it would stop or diminish the flow at the source. Unfortunately, this has proved unsuccessful so far.

We are working on a containment system which will place large enclosures or containment chambers atop the leaks and conduct flow to a ship at the surface. There have been technical challenges, however. Engineers are now working to see if these challenges can be overcome.

We have begun to drill the first of two relief wells designed to intercept and permanently secure the original well. We began drilling the first relief well on May 2 and expect to begin drilling the second relief well later this week. This operation could take approximately 3 months.

A fourth effort, known as a "top kill," uses a tube to inject a mixture of multi-sized particles directly into the blowout preventers to cap the well. It's a proven industry technique and it's been used worldwide, but never in 5,000 feet of water.

On the open water a fleet of about 300 response vessels has been mobilized and about one million feet of boom is now in place, with more than a million more feet available. We are also attacking the spill area with Coast Guard-approved biodegradable dispersants, which are being applied from planes and boats. We have also developed and tested a technique to apply dispersant at the leak point on the seabed. The EPA is carefully analyzing options for this technique's further use.

To protect the shoreline, we are implementing what the U.S. Coast Guard has called the most massive shoreline protection effort

ever mounted. 13 staging areas are in place and over 4,000 volunteers have already been trained.

We recognize that there are both environmental and economic impacts. BP will play all necessary cleanup costs and is committed to paying legitimate claims for other loss and damages caused by the spill.

Tragic and unforeseen as this accident was, we must not lose sight of why BP and other energy companies are operating in the offshore, including the Gulf of Mexico. The Gulf provides one in four barrels of oil produced in the United States, a resource our economy requires. BP and the entire energy industry are under no illusions about the challenge we face. We know that we will be judged by our response to this crisis. We intend to do everything in our power to bring this well under control, to mitigate the environmental impact of the spill, and to address economic claims in a responsible manner. No resource available to this company will be spared. I can assure you that we and the entire industry will learn from this terrible event and emerge from it stronger and safer.

Thank you for the opportunity to appear before you today. I'd be happy to answer your questions.

[The prepared statement of Mr. McKay follows:]

PREPARED STATEMENT OF LAMAR MCKAY¹, CHAIRMAN & PRESIDENT, BP AMERICA, INC.

Chairman Bingaman, Ranking Member Murkowski, members of the committee, I am Lamar McKay, Chairman and President of BP America.

We have all experienced a tragic series of events.

I want to be clear from the outset that we will not rest until the well is under control. As a responsible party under the Oil Pollution Act, we will carry out our responsibilities to mitigate the environmental and economic impacts of this incident.

We—and, indeed, the entire energy sector as a whole—are determined to understand what happened, why it happened, take the learnings from this incident, and make the changes necessary to make our company and our industry stronger and safer. We understand that the world is watching and that we and our industry colleagues will be judged by how we respond to these events.

Three weeks ago tonight, eleven people were lost in an explosion and fire aboard the Transocean Deepwater Horizon drilling rig, and seventeen others were injured. My deepest sympathies go out to the families and friends who have suffered such a terrible loss and to those in Gulf Coast communities whose lives and livelihoods are being impacted.

This was a horrendous accident. We are all devastated by this. It has profoundly touched our employees, their families, our partners, customers, those in the surrounding areas and those in government with whom we are working. There has been tremendous shock that such an accident could have happened, and great sorrow for the lives lost and the injuries sustained. The safety of our employees and our contractors and the safety of the environment are always our first priorities.

Even as we absorb the human dimensions of this tragedy, I want to underscore our intense determination to do everything humanly possible to minimize the environmental and economic impacts of the resulting oil spill on the Gulf Coast. From the outset, the global resources of BP have been engaged. Nothing is being spared. We are fully committed to the response.

And from the beginning, we have never been alone. On the night of the accident, the Coast Guard helped rescue the 115 survivors from the rig. The list of casualties could easily have been longer without the professionalism and dedication of the Coast Guard.

¹The data described throughout this testimony is accurate to the best of my knowledge as of 8am Monday, May 10, 2010, when this testimony was submitted. The information that we have continues to develop as our response to the incident continues.

Even before the Transocean Deepwater Horizon sank on the morning of April 22nd, a Unified Command structure was established, as provided by federal regulations. Currently led by the National Incident Commander, Admiral Thad Allen, the Unified Command provides a structure for BP's work with the Coast Guard, the Minerals Management Service and Transocean, among others.

Immediately following the explosion, in coordination with the Unified Command, BP began mobilizing oil spill response resources including skimmers, storage barges, tugs, aircraft, dispersant, and open-water and near shore boom.

Working together with federal and state governments under the umbrella of the Unified Command, BP's team of operational and technical experts is coordinating with many agencies, organizations and companies. These include the Departments of Energy, Interior, Homeland Security and Defense, National Oceanic and Atmospheric Administration (NOAA), US Fish & Wildlife Service (USFW), National Marine Fisheries Service (NMFS), EPA, OSHA, Gulf Coast state environmental and wildlife agencies, the Marine Spill Response Corporation (an oil spill response consortium), as well as numerous state, city, parish and county agencies.

As Coast Guard Rear Admiral Mary Landry noted on April 28: "BP is being appropriately forward leaning in bringing all the resources to bear to control this spill."

The industry as a whole has responded in full support. Among the resources that have been made available:

- Drilling and technical experts who are helping determine solutions to stopping the spill and mitigating its impact, including specialists in the areas of subsea wells, environmental science and emergency response;
- Technical advice on blowout preventers, dispersant application, well construction and containment options;
- Additional drilling rigs to serve as staging areas for equipment and responders, more remotely operated vehicles (ROVs) for deep underwater work, barges, support vessels and additional aircraft, as well as training and working space for the Unified Command.

The actions we're taking

As Chairman and President of BP America, I am part of an executive team that reports directly to our Global CEO, Tony Hayward. I am BP's lead representative in the US and am responsible for broad oversight and connectivity across all of our US-based businesses.

BP itself has committed tremendous global resources to the effort. Among many other tasks, they are helping to train and organize the more than 10,000 citizen volunteers who have come forward to offer their services.

Indeed, we have received a great many offers of help and assistance. The outpouring of support from government, industry, businesses and private citizens has truly been humbling and inspiring. It is remarkable to watch people come together in crisis.

Our efforts are focused on two overarching goals:

- Stopping the flow of oil; and
- Minimizing the impact on the environment.

Subsea efforts to secure the well

Our subsea efforts to stop the flow of oil and secure the well have involved four concurrent strategies:

- Working to activate the blow-out preventer (BOP) on the well using submersible ROVs. This would be the preferred course of action, since it would stop or diminish the flow at the source on the ocean floor. Unfortunately, this effort has so far not proved successful.
- Work continues on a subsea oil recovery plan using a containment system, placing large enclosures or containment chambers atop the leaks and conducting flow from the ocean floor to a ship at the surface through a pipe. As we anticipated, however, there have been technical challenges. This system has never been used before at 5,000 feet. Engineers are now working to see if these challenges can be overcome.
- We have begun to drill the first of two relief wells to permanently secure the well. These wells are designed to intercept the original MC252 #1 well. Once this is accomplished, a specialized heavy fluid will be injected into the well bore to stop the flow of oil and allow work to be carried out to permanently cap the existing well. On Sunday, May 2nd, we began drilling the first of these wells. A second drillship will mobilize to the area to begin the second relief well later this week. This relief well operation could take approximately three months.

- A fourth effort is known as a “top kill.” It is a proven industry technique for capping wells and has been used worldwide, but never in 5000 feet of water. It uses a tube to inject a mixture of multi-sized particles directly into the blow-out preventer. The attempt to do this could take two or three weeks to accomplish.

We have succeeded in stopping the flow from one of the three existing leak points on the damaged well. While this may not affect the overall flow rate, it should reduce the complexity of the situation to be dealt with on the seabed.

Attacking the spill

We are attacking the spill on two fronts: in the open water and on the shoreline, through the activation of our pre-approved spill response plans.

- On the water On the open water, we have mobilized a fleet of 294 response vessels, including skimmers, storage barges, tugs, and other vessels. The Hoss barge, the world's largest skimming vessel, has been onsite since April 25. In addition, there are 15, 210-foot Marine Spill Response Corporation Oil Spill Response Vessels, which each have the capacity to collect, separate, and store 4000 barrels of oil. To date, over 97,000 barrels of oil and water mix have been recovered.

Also on the open water, we are attacking the spill area with Coast Guardapproved biodegradable dispersants, which are being applied from both planes and boats. Dispersants are soap-like products which help the oil to break up and disperse in the water, which, in turn, helps speed natural degradation.

Thirty-seven aircraft, both fixed-wing and helicopters, are now supporting the response effort. Over 444,000 gallons of dispersant have been applied on the surface and more than 180,000 gallons are available. Typically, about 2,100 gallons of dispersant is needed to treat 1,000 barrels of oil.

To ensure that adequate supplies of dispersant will be available for surface and subsea application, the manufacturer has stepped up the manufacturing process, and existing supplies are being sourced from all over the world. The cooperation of industry partners has been superb and that is deeply, deeply appreciated.

We have also developed and tested a technique to apply dispersant at the leak point on the seabed. As far as we are aware, this is the first documented attempt to apply dispersant at the source. Early evidence suggests that the test has been impactful, and we are working with NOAA, EPA, and other agencies to refine and improve the technique. EPA is carefully monitoring the impact of dispersant and is analyzing its potential impact on the environment and options for possible future use.

Actions to protect the shoreline

Near the shoreline, we are implementing with great urgency oil spill response contingency plans to protect sensitive areas. According to the Coast Guard, the result is the most massive shoreline protection effort ever mounted.

To ensure rapid implementation of state contingency plans, we announced last week that we would make available grants of \$25 million to Louisiana, Mississippi, Alabama, and Florida.

To date, we have about one million feet of boom deployed in an effort to contain the spill and protect the coastal shoreline, and another 1.3 million feet are available. The Department of Defense is helping to airlift boom to wherever it is needed across the Gulf coast.

Incident Command Posts have been or are being established at:

- Alabama: Mobile;
- Florida: St. Petersburg;
- Louisiana: Robert and Houma.

Thirteen staging areas are also in place to help protect the shoreline:

- Alabama: Theodore, Orange Beach and Dauphin Island;
- Florida: Panama City and Pensacola.
- Louisiana: Grand Isle, Venice, Shell Beach, Slidell, Cocodrie;
- Mississippi: Pascagoula, Biloxi and Pass Christian;

Highly mobile, shallow draft skimmers are also staged along the coast ready to attack the oil where it approaches the shoreline.

Wildlife clean-up stations are being mobilized, and pre-impact baseline assessment and beach clean-up will be carried out where possible. Rapid response teams are ready to deploy to any affected areas to assess the type and quantity of oiling, so the most effective cleaning strategies can be applied.

A toll-free number has been established to report oiled or injured wildlife, and the public is being urged not to attempt to help injured or oiled animals, but to report any sightings via the toll-free number.

Contingency plans for waste management to prevent secondary contamination are also being implemented.

Over 10,000 personnel are now engaged in the response, including shoreline defense and community outreach.

Additional resources, both people and equipment, continue to arrive for staging throughout the Gulf states in preparation for deployment should they be needed.

Communication, community outreach, & engaging volunteers

We are also making every effort to keep the public and government officials informed of what is happening.

BP executives have regularly briefed the President's Cabinet and National Security Council team, members of Congress, the governors and attorneys general of the Gulf Coast states, and many local officials.

On the ground, in the states and local communities, we are working with numerous organizations such as fishing associations, local businesses, parks, wildlife and environmental organizations, educational institutions, medical and emergency establishments, local media, and the general public.

BP is leading volunteer efforts in preparation for shoreline clean-up. We have and will continue to help recruit and deploy volunteers, many of whom are being compensated for their efforts, to affected areas. More than 14,000 calls from volunteers offering their help have been received and over 4,000 volunteers have been trained thus far.

Volunteer activities at this time are focused on clearing the beaches of existing debris and placing protective boom along the shoreline. Our "adopt a boom" program is proving very successful in engaging local fishermen in the response. More than 600 fishing vessels are signed up to deploy boom and assist with the response.

There are five BP community-outreach sites engaging, training, and preparing volunteers:

- Alabama: Mobile;
- Florida: Pensacola;
- Louisiana: Venice
- Mississippi: Pascagoula and Biloxi.

A phone line has been established for potential volunteers to register their interest in assisting the response effort.

Coping with economic impacts

We recognize that beyond the environmental impacts there are also economic impacts on the people of the Gulf Coast states. BP will pay all necessary clean up costs and is committed to paying legitimate claims for other loss and damages caused by the spill.

We have put in place a BP Claims Process. All claimants are being directed to a toll-free number and a website and will be assigned to experienced adjusters who will assist them in making their claim.

As an alternative, claimants can visit one of BP's Community Outreach Centers or claims centers.

The process is being expedited to make immediate payments to those who have experienced a loss of income, while the overall claim is more fully evaluated. As of today, we have paid out approximately \$3.5 million.

Commitment to investigate what happened

BP is one of the lease holders and the operator of this exploration well. As operator, BP hired Transocean to conduct the well drilling operations. Transocean owned the Deepwater Horizon drilling rig and its equipment, including the blowout preventer.

The questions we all want answered are: What happened on the seabed and aboard the Deepwater Horizon and why did these things happen?

A full answer to those questions will have to await the outcome of a joint investigation by the Departments of Homeland Security and Interior, investigation by Congress, and an independent internal investigation that BP is conducting.

BP's investigation into the cause of this accident is being led by a senior BP executive from outside the affected business. The team has more than 40 people. The investigation is ongoing and has not yet reached conclusions about incident cause. We intend to share the results of our findings so that our industry and our regulators can benefit from the lessons learned.

Investigations take time, of course, in order to ensure that the root cause of the failure is fully understood. But let me give you an idea of the questions that BP and the entire energy industry, are asking:

- What caused the explosion and fire?
- And why did the blowout preventer fail?

Only seven of the 126 onboard the Deepwater Horizon were BP employees, so we have only some of the story, but we are working to piece together what happened from meticulous review of the records of rig operations that we have as well as information from those witnesses to whom we have access.

We are looking at our own actions and those of our contractors, as is the Marine Board. We are looking at why the blowout preventer did not work because that was to be the fail-safe in case of an accident. The blowout preventer is a 450-ton piece of equipment that sits on top of the wellhead during drilling operations. It contains valves that can be closed remotely if pressure causes fluids such as oil or natural gas to enter the well and threaten the drilling rig. By closing this valve, the drilling crew can regain control of the well.

Blowout preventers are used on every oil and gas well drilled in the world today. They are carefully and deliberately designed with multiple levels of redundancy and are regularly tested. If they don't pass the test, they are not used.

The systems are intended to fail-closed and be fail-safe; sadly and for reasons we do not yet understand, in this case, they were not. Transocean's blowout preventer failed to operate.

All of us urgently want to understand how this vital piece of equipment and its built-in redundancy systems failed and what measures are required to prevent this from ever happening again. In this endeavor, you will have the full support of BP as well as, I am sure, the rest of the industry.

Energy policy remains critical

Tragic and unforeseen as this accident was, we must not lose sight of why BP and other energy companies are operating in the offshore, including the Gulf of Mexico. The Gulf is one of the world's great energy producing basins, providing one in four barrels of oil produced in the United States. That is a resource that powers America and the world every day, one our economy requires.

Conclusion

But before we can think about the future, we have to deal with the immediate challenge of today.

BP is under no illusions about the seriousness of the situation we face. In the last three weeks, the eyes of the world have been upon us. President Obama and members of his Cabinet have visited the Gulf region and made clear their expectations of BP and our industry. So have members of Congress, as well as the general public.

We intend to do everything within our power to bring this well under control, to mitigate the environmental impact of the spill and to address economic claims in a responsible manner.

Any organization can show the world its best side when things are going well. It is in adversity that we truly see what they are made of.

We know that we will be judged by our response to this crisis. No resource available to this company will be spared. I can assure you that we and the entire industry will learn from this terrible event, and emerge from it stronger, smarter and safer.

The CHAIRMAN. Thank you.

Mr. Newman, go right ahead.

STATEMENT OF STEVEN NEWMAN, CHIEF EXECUTIVE OFFICER, TRANSOCEAN, LTD

Mr. NEWMAN. Chairman Bingaman, Ranking Member Murkowski, and other members of the committee: I want to thank you for the opportunity to speak with you today. My name is Steven Newman and I am the chief executive officer of Transocean Limited. Transocean is the leading offshore drilling contractor, with more than 18,000 employees worldwide. I am a petroleum engineer by training and I have spent years working with and on drilling rigs. I have worked at Transocean for more than 15 years and I am